Editorial

Friendly Fire

"Chance favors the prepared mind" Louis Pasteur

Progress in science has been marked through the ages by public airing of controversial issues. Indeed, the rewards for innovative progress have included banishment, imprisonment, casting out devils, and even burning at the stake (1). Those who dared to challenge prevailing concepts that matter was composed of four fundamental substances, earth, air, fire, and water (2), and that humors were elemental body fluids defining the physiologic and pathologic teachings of the Hippocratic school (3) often became scientific martyrs. Scientific debate continued unabated throughout the ages. One of the most famous controversies involved Copernicus, who challenged all Christendom when he proposed that the earth revolved around the sun casting doubt on the geocentric theory "proven" by Ptolemy (4). The concept that the earth was round instead of flat was decried by kings and rulers worldwide until Magellan sailed the oceans (5). Harvey's proposal that the blood circulated through the body in a closed system pumped by the heart was booed out of the lecture hall (6), while the rejection of spontaneous generation and the idea that unseen microbes transmitted disease almost cost Pasteur his tenured position (7).

Todays novel ideas and scientific hypotheses are debated with no less enthusiasm but with less risky consequences. The editors of *Environmental Health Perspectives* begin a series of articles designated **Friendly Fire** that will appear whenever controversial scientific issues would benefit from public debate. The title of the series derives from the military term denoting self-inflicted casualties that are unavoidable whenever conflict ensues. We hope that no mortality occurs, but we will accept minor wounds in the battles ahead.

Initially the editors of EHP will select topics that are of broad interest to the environmental community and of great importance for public health, such as risk assessment for arsenic (8), health effects of EMF exposure (9), linear versus nonlinear dose-responses for dioxin (10), long-term toxicity from lead exposure (11), value of metal chelation therapy (12), risks of radon exposure (13), multiple chemical sensitivity (14), and so on. Topics may be submitted by readers as well, in hopes that a public and open format for debate will maintain an objective and informative source of information for the broad readership of EHP.

The information for this new section will be added to the Editorial Policy and Instructions for Authors found in the back of each issue of EHP. Ordinarily, one of the editors of EHP will write a short introduction for the debate, followed by experts in the field who will write either a "pro" or "con" article citing the scientific references that justify their positions on the topic. A feature unavailable to other authors for EHP will be the opportunity for the experts to exchange articles and write one page rebuttals to be included in the published material. Occasionally a guest editor, with approval and review by EHP, may nominate expert authors and be responsible for production of the entire section.

Some of the current topics scheduled for debate include discussions of health risks from arsenic ingestion, policies used in risk

evaluation of electromagnetic fields, relationships between exposure to electromagnetic fields and breast cancer, epidemiological evidence of estrogen toxicity, and evaluation of multiple chemical sensitivity. The protagonists are experts in their fields who will present brief reviews of the topic with substantive evidence for interpretation of the available experimental data. Each of these topics must inevitably deal with estimations of risk, which necessarily involve social and economic as well as scientific issues. The journal will strive to address such controversial subjects that have great impact on environmental health with the aim to educate the public and advance the science of environmental research.

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